

# DECLARATION AND POWER OF ATTORNEY: ORIGINAL APPLICATION

As a below named inventor, I hereby declare that:  
My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled **OPTIMAL BOOLEAN SET OPERATION GENERATION AMONG POLYGON- REPRESENTED REGIONS** described in

the specification herewith  
 provisional application serial no. \_\_\_\_\_, filed \_\_\_\_\_,  patent no. \_\_\_\_\_, issued \_\_\_\_\_

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code §119 of any foreign applications(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, mo, yr)	PRIORITY CLAIMED
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I hereby claim the benefit under Title 35, United States Code §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

APPLICATION NUMBER	DATE OF FILING (day, month, year)	STATUS (patented, pending, abandoned)
60/153,569	09/13/1999	Provisional

POWER OF ATTORNEY: As a named Inventor, I hereby appoint the following attorney(s) to prosecute this application and transact all business in The Patent and Trademark Office connected therewith:

Royal W. Craig, Reg. No. 34,145

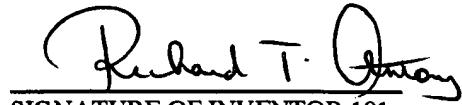
SEND CORRESPONDENCE TO:

Law Offices of Royal W. Craig  
210 N. Charles St.  
Suite 1319  
Baltimore, Maryland 21201

(101)	FULL NAME OF INVENTOR ANTONY, Richard T.	FAMILY NAME ANTONY	FIRST GIVEN NAME Richard	SECOND GIVEN NAME T.
	RESIDENCE & CITIZENSHIP 488 Long Mountain Road	CITY Washington	STATE Virginia	COUNTRY OF CITIZENSHIP USA

POST OFFICE ADDRESS  
488 Long Mountain Road, Washington, Virginia 22747

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
SIGNATURE OF INVENTOR 101

9/5/00  
DATE

Applicant/Patentee: Antony, Richard T. Docket No: VGS-PA-1  
Serial or Pat No.: To be assigned  
Filed or Issued: Herewith  
For: OPTIMAL BOOLEAN SET OPERATION GENERATION AMONG POLYGON-  
REPRESENTED REGIONS

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY  
STATUS (37 CFR 1.9(f) and 1.27(b)) - INDEPENDENT INVENTOR**

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled "OPTIMAL BOOLEAN SET OPERATION GENERATION AMONG POLYGON-REPRESENTED REGIONS" described in

the specification filed herewith  
 application serial no. \_\_\_\_\_,  patent no. \_\_\_\_\_,  issued  filed

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below.

no such person, concern, or organization  
 persons, concerns, or organizations listed below\*

\*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

FULL NAME: VGS, Incorporated  
ADDRESS: 10302 Eaton Place, Suite 150, McLean, Virginia 22102

INDIVIDUAL  SMALL BUSINESS CONCERN  NON PROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28 (b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Richard T. Antony  
NAME OF INVENTOR

Richard T. Antony  
Signature of Inventor

Date

9/5/00

Applicant or Patentee: Antony, Richard T. Docket No: VGS-PA-1  
Serial or Patent No.: To be assigned  
Filed or Issued: Herewith  
For: OPTIMAL BOOLEAN SET OPERATION GENERATION AMONG POLYGON-REPRESENTED REGIONS

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(f) and 1.27(b)) - SMALL BUSINESS CONCERN**

I hereby declare that I am

- ( ) the owner of the small business concern identified below:  
( ) an official of the small business concern empowered to act on behalf of the concern identified below:

FULL NAME: VGS, Incorporated

ADDRESS: 10302 Eaton Place, Suite 150, McLean, Virginia 22102

INDIVIDUAL  SMALL BUSINESS CONCERN  NON PROFIT ORGANIZATION

I hereby declare that the above-identified small business concern qualifies as a small business concern as defined in 37 CFR 1.9(d), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed and remain with the small business concern identified above with regard to the invention entitled "OPTIMAL BOOLEAN SET OPERATION GENERATION AMONG POLYGON-REPRESENTED REGIONS" described in

the specification filed herewith

provisional application serial no. \_\_\_\_\_  patent no. \_\_\_\_\_,  issued  filed

The rights held by the above-identified small business concern are exclusive and no rights to the invention are held by any person, other than the inventor, who could not qualify as a small business concern under 37 CFR 1.9(d) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28 (b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

VGS, Incorporated  
10302 Eaton Place, Suite 150, McLean, Virginia 22102  
By: Mr. John R. Walsh, President

John R. Walsh  
SIGNATURE

8/5/00  
DATE

President  
POSITION